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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,514

12/20/2004

Gunter Doemens

4001-1192

8374

466 7590 10/20/2008

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EXAMINER

PARK, EDWARD

ART UNIT

PAPER NUMBER

2624

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DELIVERY MODE

10/20/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/518,514	<b>Applicant(s)</b> DOEMENS ET AL.	
	<b>Examiner</b> EDWARD PARK	<b>Art Unit</b> 2624	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 August 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/14/08 has been entered.

### ***Specification***

2. In response to applicant's amendment of the title, the previous objection is withdrawn.

### ***Claim Rejections - 35 USC § 112***

3. In response to applicant's cancellation of claims 36 and 37, the previous claim rejection is withdrawn.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. **Claims 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanna et al (US 6,714,665 B1) in view of Mahbub (US 6,961,443 B2).

Regarding **claims 16, 18, 20**, Hanna discloses a method for recording individuals, comprising: recording at the same time with a single optical sensor at least one subarea of a face and at least one subarea of a hand of the individual to be identified, whereby the optical sensor records a surface picture of the face or the hand partially or completely and evaluating in an evaluating unit (see figure 6, numerals 610, 612, 614 which are sub-areas of the face and the hand of the individual which is recorded by a “imager”/optical sensor, see figure 3, numeral 10, col. 10, lines 8-31 and is evaluated by figure 3, numeral 316, “stereo module” that locates portions of the image which include features such as skin tones or inter-image motion, see col. 10, lines 8-31). Hanna does not disclose using a single optical sensor and using optical triangulation to determine three-dimensional spatial coordinates, triangulation, and a laser scanner.

Mahbub teaches using a single optical sensor (see figure 4, numeral 36 camera is a single optical sensor) and using optical triangulation to determine three-dimensional spatial coordinates (see col. 4, lines 18-55 “3-D coordinated are measured using triangulation of the light spots”), triangulation (see col. 4, lines 18-55 “3-D coordinated are measured using triangulation of the light spots”), and a laser scanner (see figure 7, numeral 44, 48, col. 4, lines 57-67, col. 5, lines 1-7, “laser range finder” which determines 3-D coordinates).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify the Hanna reference to utilize a single optical sensor with optical triangulation

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with a laser scanner as suggested by Mahbub, to decrease the cost and complexity of the overall system by decreasing the quantity of cameras needed to determine 3d coordinates by utilizing a single camera with a laser scanner (see col. 4, lines 1-67).

Regarding **claim 17**, Hanna discloses an imaging process (see figure 3 the system as a whole is an imaging process).

Regarding **claim 21**, Hanna discloses recording by the optical sensor (see figure 3, numeral 10 camera/imager is an optical sensor) additionally in two dimensions (see figure 3, numeral 10 camera captures an image in two dimensions).

Regarding **claim 22**, Hanna discloses recording repeatedly by the optical sensor in order to record a movement (see col. 10, lines 8-30 imager/camera provides images to the host processor at a rate of three to five images per second).

Regarding **claim 23**, Hanna discloses a device for identifying an individual, comprising: a single optical sensor, adapted to record at the same time at least one subarea of a face and a hand of the individual; an evaluating unit that works together with the optical sensor, wherein the optical sensor and the evaluating unit are able to record and identify the face of the individual to be identified, such that the optical sensor is configured to record surface picture of the face or the hand partially or completely (see figure 6, numerals 610, 612, 614 which are sub-areas of the face and the hand of the individual which is recorded by a “imager”/optical sensor, see figure 3, numeral 10, col. 10, lines 8-31 and is evaluated by figure 3, numeral 316, “stereo module” that locates portions of the image which include features such as skin tones or inter-image motion, see col. 10, lines 8-31). Hanna does not disclose determining three-dimensional spatial coordinates by optical triangulation.

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Mahbub, in the same field of endeavor, teaches determining three-dimensional spatial coordinates by optical triangulation ((see col. 4, lines 18-55 “3-D coordinated are measured using triangulation of the light spots”), triangulation (see col. 4, lines 18-55 “3-D coordinated are measured using triangulation of the light spots”), and a laser scanner (see figure 7, numeral 44, 48, col. 4, lines 57-67, col. 5, lines 1-7, “laser range finder” which determines 3-D coordinates)).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify the Hanna reference to utilize a single optical sensor with optical triangulation with a laser scanner as suggested by Mahbub, to decrease the cost and complexity of the overall system by decreasing the quantity of cameras needed to determine 3d coordinates by utilizing a single camera with a laser scanner (see col. 4, lines 1-67).

Regarding **claim 24**, Hanna discloses recording both the at least one subarea of the face or the at least one subarea of the hand in an imaging process (see figure 3, numeral 10 which records the subareas of the face and hand of figure 6, numerals 612, 614).

Regarding **claims 25 and 26**, Hanna with Mahbub combination discloses all elements as mentioned above in claim 23. Hanna with Mahbub combination does not disclose recording the face or the hand partially or completely in three dimensions and triangulation as part of a light section method.

Mahbub teaches recording partially or completely in three dimensions and triangulation as part of a light section method (see col. 4, lines 18-55 “3-D coordinated are measured using triangulation of the light spots”).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify the Hanna with Mahbub combination to utilize three dimensions and

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triangulation as suggested by Mahbub, to pre-process an image for multiple biometric feature recognition and to decrease the cost and complexity of the overall system by decreasing the quantity of cameras needed to determine 3d coordinates by utilizing a single camera with triangulation.

Regarding **claim 27**, Hanna discloses implementing an imaging method (see figure 3 the system as a whole is an imaging method).

Regarding **claim 28**, Hanna discloses partially or completely recording a movement by repeatedly recording the face or the hand (see col. 10, lines 8-30 imager/camera provides images of figure 6 to the host processor at a rate of three to five images per second).

Regarding **claim 29**, Hanna discloses recording by the optical sensor (see figure 3, numeral 10 camera/imager is an optical sensor) additionally in two dimensions (see figure 3, numeral 10 camera captures an image in two dimensions).

Regarding **claim 30**, Hanna discloses recording by the optical sensor (see figure 3, numeral 10 camera/imager is an optical sensor) additionally in two dimensions (see figure 3, numeral 10 camera captures an image in two dimensions).

Regarding **claim 32**, Hanna discloses recording by the optical sensor (see figure 3, numeral 10 camera/imager is an optical sensor) additionally in two dimensions (see figure 3, numeral 10 camera captures an image in two dimensions).

Regarding **claim 33**, Hanna discloses recording repeatedly by the optical sensor in order to record a movement (see col. 10, lines 8-30 imager/camera provides images to the host processor at a rate of three to five images per second).

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Regarding **claim 34**, Hanna discloses recording repeatedly by the optical sensor in order to record a movement (see col. 10, lines 8-30 imager/camera provides images to the host processor at a rate of three to five images per second).

6. **Claims 19, 31, 35** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Hanna et al (US 6,714,665 B1) with Mahbub (US 6,961,443 B2) as applied to claim 18 above, and further in view of Ban et al. (US 6,775,403 B1).

Regarding **claim 19**, Hanna with Mahbub combination discloses all elements as mentioned above in claim 18. Hanna with Mahbub combination does not disclose utilizing a light –section method.

Ban teaches utilizing a light-section method (Ban: col. 4, lines 31-39).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify the Hanna with Mahbub combination to utilize a light-section method as suggested by Ban, to “[convert] shape information into 3-D range image data (so-called 3-D image data)” in a non-contact measuring method, which is considered well known in the art.

Regarding **claim 31**, Hanna discloses recording by the optical sensor (see figure 3, numeral 10 camera/imager is an optical sensor) additionally in two dimensions (see figure 3, numeral 10 camera captures an image in two dimensions).

Regarding **claim 35**, Hanna discloses recording repeatedly by the optical sensor in order to record a movement (see col. 10, lines 8-30 imager/camera provides images to the host processor at a rate of three to five images per second).

***Response to Arguments***

7. Applicant's arguments filed on 8/14/08 have been fully considered but they are not persuasive. Applicant argues that Mahbub does not teach or infer the simultaneous utilization of face and hand part of the person to be identified (see pg. 10, last paragraph, pg. 11, first paragraph). This argument is not considered persuasive because the applicant is not clear on which limitation the applicant is referring to and furthermore, Mahbub is not utilized to teach the limitation of simultaneous utilization of face and hand part of the person to be identified. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., simultaneous utilization of face and hand parts of the person to be identified) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues that Hanna and Mahbub both do not disclose a process or apparatus for personal identification by utilization of an optical sensor so that the processing of a facial part and a hand part of the person allows identification of the person (see pg. 13, last paragraph, pg. 14, first paragraph). This argument is not considered persuasive since the claim limitation does not call for personal identification of an individual rather just the recording ability and the possibility of identifying as intended use. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., process or apparatus for personal identification by utilization of an optical sensor so that the processing of a facial part and a hand part of the person allows identification of

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the person) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues that Hanna does not disclose a single optical sensor to obtain a reliable and quick identification of the person (see pg. 14, second paragraph). This argument is not considered persuasive since the claim limitation does not specify that identification is accomplished but rather as intended use. It can be seen in claim 16 that the limitation only calls for recording at the same time with a single optical sensor at least one subarea of a face and at least one subarea of a hand of the individual to be identified. The claim does not expand on the identification nor does the claim state any sort of identification process utilizing the subarea of a face or subarea of a hand. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a single optical sensor to obtain a reliable and quick identification of the person) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues that the applicant's invention stores data of the digital picture in a data bank and that Hanna does not meet the limitation (see pg. 14, third paragraph). This argument is not considered persuasive since claim 16 or 23 does not mention any sort of digital picture in a data bank. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., stores data of the digital picture in a data bank) are not recited in the rejected claim(s). Although the claims are

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interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues that claims 16 and 23 can not be taught by the combination of Hanna and the secondary references (see pg. 14, last paragraph). This argument is not considered persuasive since the rejection of the claims 16 and 23 stand as seen above and the arguments for these respective claims are also mentioned above. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it can be seen in the rejection above for claims 16 and 23, that the motivation to combine the references are sufficient and that the claims stand rejected and the arguments can be seen above.

Applicant argues that the claims depending upon claims 16 and 23 are patentable for the same reasons as stated above (see pg. 15, first paragraph). This argument is not considered persuasive since claims 16 and 23 stand rejected and the arguments and rejection can be seen above.

Examiner notes that applicant states from the specification the reasons why the claims rebut any unpatentability that could be alleged (see pg. 15). This statement is not considered persuasive since it clearly shows that the applicant is attempting to bring in limitations from the specification in the claims. Furthermore, the claim language does not even recite remotely the

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limitations from the specification. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., pg. 15, applicant's argument) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDWARD PARK whose telephone number is (571)270-1576. The examiner can normally be reached on M-F 10:30 - 20:00, (EST).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on (571) 272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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